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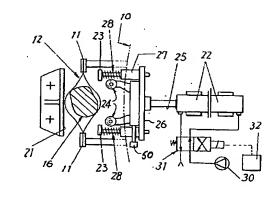
FC04 FG10

(54) 【発明の名称】 包装体の整形包装方法及び装置

(57)【要約】

一対のクランパー11に支持した包袋12の 移送軌道を隔て、機台20に固定した受け板21と、流 体シリンダ22に支持する一対の可動クリップ23及び 一対の押圧体24とが対向する。前記両可動クリップ2 3はそれそぞれピストンロッド25に固定する基板26 両側のスリーブ27に支持され、バネ28の張力は両可 動クリップ23を前方に押し出すように付勢する。この ためピストンロッド25が基板26を押し出すと、可動 クリップ23は包袋12の側縁を受け板21に押し付け バネ28の反力は包袋12両側縁を固定する。一方両側 一対の押圧体24は基板26に縦軸を介して回転自在に 支持するローラにより形成しており、これらローラ24 は棒状被包装物16両側で包袋12を狭窄する。ローラ 24は包袋との摩擦を避けるため回転する結果、被包装 物16を包袋の中心にせり込み、包袋の袋口の閉鎖す る。

【効果】 沢庵のような腰の弱い被包装物を、包袋中央 に真っ直ぐに包装する。



【特許請求の範囲】

【請求項1】 2個を1組とする多数組のクランパーを 無端軌道に沿って1ピッチづつ断続移送し、中途の停止 セクションにおいて前記各組のクランバーが吊り下げ状 に支持する包袋内に棒状の被包装物を投入する袋詰め包 装機において、前記中途の投入セクション後方の停止セ クションで前記包袋両側縁をそれぞれ挟圧保持すると共 に、前記棒状被包装物の両側から同被包装物を包袋の中 心に向けてせり込むような外力を作用させ、その後包袋 内を脱気する包装体の整形包装方法。

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【請求項2】 棒状被包装物の両側から同被包装物を包 袋の中心に向けてせり込むような外力と共に、被包装物 に振動を作用させる請求項1に記載の方法。

【請求項3】 2個を1組とする多数組のクランバーを 無端軌道に沿って1ビッチづつ断続移送し、中途の停止 セクションにおいて前記各組のクランパーが吊り下げ状 に支持する包袋内に棒状の被包装物を投入する袋詰め包 装機にであって、前記中途の投入セクション後方の停止 セクションにおいて、前記包袋両側縁をそれぞれバネ圧 で挟圧保持する一対の可動クリップ及び、前記棒状被包 20 装物の両側から同被包装物を包袋の中心に向けてせり込 む両側押圧体と、その後方の、包袋内を脱気する手段と からなる包装体の整形包装装置。

【請求項4】 両側押圧体の間隔を自在調整可能にした 請求項3に記載の装置。

【請求項5】 棒状被包装物の両側から同被包装物を包 袋の中心に向けてせり込む両側押圧体を、縦軸に回転自 在に支持するローラにより構成する請求項3に記載の装 置。

【請求項6】 棒状被包装物の両側から同被包装物を包 30 袋の中心に向けてせり込む両側押圧体を、一側を縦軸に 回転自在に支持するローラで形成し、その対向部を受け 板により構成する請求項5に記載の装置。

【請求項7】 棒状被包装物の両側から同被包装物を包 袋の中心に向けてせり込む両側押圧体と共に、被包装物 に振動を作用させるバイブレータを備える請求項3ない し6に記載の装置。

【発明の詳細な説明】

[0001]

【発明の属する技術分野】本発明は、2個を1組とする 多数組のクランパーを無端軌道に沿って1ピッチづつ断 続移送し、第1停止セクションにおいて前記各組のクラ ンパーが吊り下げ状に支持する包袋内に棒状の被包装物 を投入する袋詰め包装機において、包袋内の棒状被包装 物の姿勢を整形して包装体として仕上げるための方法及 び装置に関する。

[0002]

【発明が解決しようとする課題】前記包装機のクランバ ーに吊り下げた包袋に、例えば沢庵のことき腰の弱い棒

の重量でくの字に折れ曲がって密封され、商品性に乏し くなる。常識的には細い包袋で被包装物の変形の発生を 防ぐことは可能であるが、このような細い包袋の使用は 商品として貧弱でとれまた商品価値に乏しい欠点があ る。従来実開平5-75111には、図8に示すごとく 幅広の包袋1の両側を仮挟圧2して内部に被包装物3の 通過可能に間隙4を形成したあと、前記間隙4に被包装 物3を重力投入し、包袋内を脱気して密封し、その後前 記仮挟圧2を除去する装置を開示する。かかる手段では 10 確かに被包装物3を包袋1の中央に包装できるが、間隙 が狭いと被包装物の投入ミスが生じやすく包装能率が上 がらず、能率アップのために間隙4を調整すると被包装 物の傾き率が上がるという問題がある。

[0003]

【その解決手段】本発明は前記の問題を解決するため に、2個を1組とする多数組のクランパーを無端軌道に 沿って1ピッチづつ断続移送し、中途の停止セクション において前記各組のクランパーが吊り下げ状に支持する 包袋内に棒状の被包装物を投入する袋詰め包装機にであ って、前記中途の投入セクション後方の停止セクション において、前記包袋両側縁をそれぞれバネ圧で挟圧保持 する一対の可動クリップ及び、前記棒状被包装物の両側 から同被包装物を包袋の中心に向けてせり込む両側押圧 体と、その後方の、包袋内を脱気する手段とにより構成 する。

【0004】包袋への被包装物投入セクションの後方セ クションにおいて一対の可動クリップは、包袋両側縁を バネ圧で挟圧保持し同包袋を固定する。一方両側押圧体 は、その押圧力で棒状被包装物の両側から同被包装物を 包袋の中心に向けてせり寄せる。当該押圧体を縦軸に支 持したローラによって形成すると、該ローラの自在回転 で被包装物のせり込み効果が上がるし、この場合被包装 物に振動を作用させると同被包装物の移動はより効果的 になる。そして後方の、包袋内を脱気する手段は包袋を 偏平化して包袋内での被包装物の移動を阻止する。

[0005]

【発明の実施形態】袋詰め包装機の実施例は図4のこと く、ロータ10の周縁に設置した2個を1組とするクラ ンパー11に積層する包袋12の1枚を矢印13のごと 40 く供給すると、ロータ10の時計方向への断続回転によ って前記クランパー11は包袋12を吊り下げて1ピッ チづつ断続移動し、その1つの停止セクション14で開 口した包袋内に棒状の被包装物の投入充填を受ける。そ して、この後位の停止セクション15には下記の整形手 段が備わる。

【0006】すなわち図1及び図2に示す停止セクショ ンで前記クランパー11に支持した包袋12の移送軌道 を隔て、機台20に固定した受け板21と、流体シリン ダ22に支持する一対の可動クリップ23及び一対の押 状物を投入収容すると、包袋内でこれら被包装物は自己 50 圧体24とが対向する。前記両可動クリップ23はそれ 3

そぞれピストンロッド25に固定する基板26両側のス リーブ27に支持され、バネ28の張力は両可動クリッ ブ23を前方に押し出すように付勢する。 このためピス トンロッド25が基板26を押し出すと、可動クリップ 23は包袋12の側縁を受け板21に押し付けバネ28 の反力は包袋12両側縁を固定する(図3参照)。一方両 側一対の押圧体24は基板26に縦軸を介して回転自在 に支持するローラにより形成しており、これらローラ2 4は棒状被包装物16両側で包袋12を狭窄する。ロー ラ24は包袋との摩擦を避けるため回転する結果、被包 10 【図面の簡単な説明】 装物16は包袋の中心にせり込まれる。

【0007】図1において基板26に備わるねじ棒50 は、その回転で、被包装物16の太さに合せて両側ロー ラ24の間隔を調整できる。

【0008】図1においてシリンダ25と流体ポンプ3 0とを繋ぐラインに設置する電磁切換え弁31を、切換 え電源32の振動電波で小刻みに切り替えるように、バ イブレーション装置を形成する。かかる装置の働きによ りローラ24は被包装物16に振動を加え、同被包装物 の助動きを加勢する。なお図3のごとく被包装物16を 20 下から押し上げるバイブレーション装置35はより効果 的である。

【0009】図4における後方セクション15では、被 包装物の包袋中央へのせり込みのあと、両クランパー1 1を矢印のごとく離反する。それは図5に示すような状 態であり、両クランパー11の離反により包袋12の袋 口附近は緊張するので、被包装物 16 の直立姿勢は保持 される。との場合加圧空気36の吹き付けで包袋12内 部の空気量を減らすことにより、被包装物16の姿勢保 持はより効果的になる。とれは請求項に記載する「脱 気」の一態様である。

【0010】図4において包袋は最終セクション37に さらに移動し、ととで両側からスポンジゴムで挟圧して 内部空気を排除し脱気すると同時に、包袋12の袋口を* *加熱シールする。なお当該セクション37で脱気及びシ ールを行なわない場合は、当該セクションから袋口を挟 み持ったまま包袋11を真空チャンバーに移し、該直空 チャンバー内でバスカル値の異なる脱気及びシールを行 なう。なおこれらも態様の異なる「脱気」に相当する。 【0011】図6は中央の窪んだ受け板21を使用する 実施例で、可動クリップ23とローラ24とで包袋12 を中間挟持でき、また図7は対向する挟圧手段を同構造 にした実施例である。

- 【図1】 袋詰め機の部分的平面図
- 【図2】 前記包装機の部分的断面図
- 【図3】 前図におけるIII-III線視図
- 【図4】 袋詰め機の簡略斜面図
- 【図5】 クランパーに支持した包袋の斜面図
- 【図6】 挟圧手段の平面実施例
- 【図7】 挟圧手段の異なる実施例
- 【図8】 従来例の説明図

【符号の説明】

- 10…ロータ
 - 11…クランパー
 - 12…包袋
 - 14…投入セクション
 - 15…後方の停止セクション
 - 21…受け板
 - 22…流体シリンダ
 - 23…可動クランプ
 - 24…押圧体-ローラ
 - 25…ピストンロッド
- 30 26…基板
 - 28…バネ
 - 32…振動電源-バイブレーション装置
 - 35…バイブレーション装置
 - 36…脱気圧

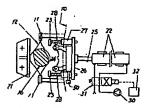
【図1】

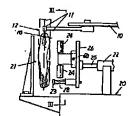
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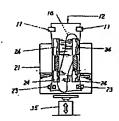
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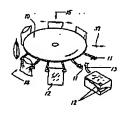
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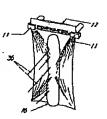
【図5】



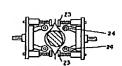




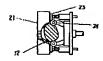




【図7】



【図6】



[図8]



PATENT ABSTRACTS OF JAPAN

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(71)Applicant : FURUKAWA MFG CO LTD

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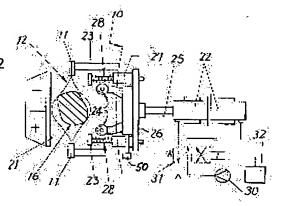
(72)Inventor: KAWAMOTO TOSHINORI

(54) DEVICE AND METHOD FOR PACKING PACKAGE NEATLY

(57)Abstract:

PROBLEM TO BE SOLVED: To pack a flexible product like a pickled radish in the center of a pacing bag by keeping it straight without bending.

SOLUTION: A receiving plate 21 mounted to a machine body 20 counters a pair of movable clips 23 supported by a hydraulic cylinder 22 and a pair of pushing parts 24, while being isolated by a moving path of a packing bag 12 supported by a pair of clamps 11. The movable clips 23 are respectively supported by both sleeves 27 located on a base plate 26 which is mounted to a piston rod 25. Tension of springs 28 adds forces to move the clips 23 forward. When the piston rod 25 pushes the base plate 26, the movable clips 23 push the edges of the packing bag 12 to the receiving plate 21, and resilience of the springs fixes both edges of the packing bag 12. The pair of the pushing parts 24 are constituted of rollers which can freely rotate on their vertical axes, and squeeze the packing bag on both sides of a rod-type package 16. Because the rollers 24 rotate to avoid friction with the



packing bag, the rollers squeeze the package 16 to the center of the packing bag, and finally openings of the packing bag are sealed.

LEGAL STATUS

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[Date of registration]

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CLAIMS

[Claim(s)]

[Claim 1] In the packed packaging machine which throws in rod-like packaging goods-ed in the bag which carries out intermittence migration of the one every pitch of the clampers of the a large number group which makes two pieces 1 set in accordance with an endless orbit, and the clamper of said each class supports in the shape of hanging in a halfway halt section while carrying out compression maintenance of said bag edges on both sides with the halt section of said halfway injection section back, respectively — the both sides of said packaging goods-ed [cylindrical] to **** packaging goods—the core of a bag — turning — ******* — the plastic surgery package approach of the package object which external force [like] is made to act and deaerates the inside of a bag after that.

[Claim 2] the both sides of packaging goods—ed [cylindrical] to **** packaging goods — the core of a bag — turning — ****** — the method according to claim 1 of making vibration act on packaging goods—ed with external force [like].

[Claim 3] In accordance with an endless orbit, intermittence migration of the one every pitch of the clampers of the a large number group which makes two pieces 1 set is carried out. Are at the packed packaging machine which throws in rod-like packaging goods-ed in the bag which the clamper of said each class supports in the shape of hanging in a halfway halt section, and it sets into the halt section of said halfway injection section back. The movable clip of the pair which carries out compression maintenance of said bag edges on both sides with spring pressure, respectively, and plastic surgery package equipment of the package object which consists of a means to turn **** packaging goods to the core of a bag from the both sides of said packaging goods-ed [cylindrical], and to deaerate the inside of a ******** both-sides press object and the bag of the back.

[Claim 4] Equipment according to claim 3 whose free adjustment of spacing of a both-sides press object was enabled.

[Claim 5] Equipment according to claim 3 constituted with the roller which turns **** packaging goods to the core of a bag from the both sides of packaging goods—ed [cylindrical], and supports a ****** both—sides press object free [rotation] on an axis of ordinate.

[Claim 6] Equipment according to claim 5 which turns **** packaging goods to the core of a bag from the both sides of packaging goods-ed [cylindrical], forms a ****** both-sides press object with the roller which supports 1 side free [rotation] on an axis of ordinate, and constitutes the opposite section with a backing plate.

[Claim 7] Claim 3 equipped with the vibrator which **** packaging goods are turned [vibrator] to the core of a bag from the both sides of packaging goods-ed [cylindrical], and makes vibration act on packaging goods-ed with a ******* both-sides press object thru/or equipment given in 6.

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DETAILED DESCRIPTION

[Detailed Description of the Invention] [0001]

[Field of the Invention] This invention carries out intermittence migration of the one every pitch of the clampers of the a large number group which makes two pieces 1 set in accordance with an endless orbit, and relates to the approach and equipment for operating the posture of the packaging goods—ed [cylindrical] in a bag orthopedically, and finishing as a package object in the packed packaging machine which throws in rod—like packaging goods—ed in the bag which the clamper of said each class supports in the shape of hanging in the 1st halt section. [0002]

[Problem(s) to be Solved by the Invention] If injection hold of the cylindrical object with the weak waist like pickled Japanese radish is carried out, within a bag, by self weight, packaging goods-ed [these] will bend into the character of **, will be sealed by the bag hung to the clamper of said packaging machine, and will become scarce at salability at it. Although it is possible to prevent generating of deformation of packaging goods-ed with a thin bag sensibly. use of such a thin bag is poor as goods, and this and commodity value have a scarce fault. Conventionally, to publication of unexamined utility model application Heisei 5-75111, as shown in drawing 8, after carrying out the both sides of the broad bag 1 temporary compression 2 and forming a gap 4 in the interior possible [passage of the packaging goods 3-ed], the gravity injection of the packaging goods 3-ed is carried out in said gap 4, the inside of a bag is deaerated and sealed, and to it, the equipment from which the account of back to front temporary compression 2 is removed is indicated. Although the packaging goods 3-ed can be packed in the center of a bag 1 to be sure with this means, if a gap is narrow, package efficiency will not increase that it is easy to produce the injection mistake of packaging goods-ed, but when a gap 4 is adjusted for an efficiency rise, there is a problem that the rate of an inclination of packaging goods-ed increases. [0003]

[The solution means] In order that this invention may solve the aforementioned problem, in accordance with an endless orbit, intermittence migration of the one every pitch of the clampers of the a large number group which makes two pieces 1 set is carried out. Are at the packed packaging machine which throws in rod-like packaging goods-ed in the bag which the clamper of said each class supports in the shape of hanging in a halfway halt section, and it sets into the halt section of said halfway injection section back. A means to turn **** packaging goods to the core of a bag from the movable clip of the pair which carries out compression maintenance of said bag edges on both sides with spring pressure, respectively, and the both sides of said packaging goods-ed [cylindrical], and to deaerate the inside of a ******* both-sides press object and the bag of the back constitutes.

[0004] In the back section of the packaging-goods-ed injection section to a bag, the movable clip of a pair carries out compression maintenance of the bag edges on both sides with spring pressure, and fixes this bag. On the other hand, a both-sides press object turns **** packaging goods to the core of a bag from the both sides of packaging goods-ed [cylindrical] by the thrust, and is ********. If it forms with the roller which supported the press object concerned

on the axis of ordinate, the **** lump effectiveness of packaging goods-ed will go up by free rotation of this roller, and if vibration is made to act on packaging goods-ed in this case, migration of **** packaging goods will become more effective. And a means to deaerate the inside of a back bag carries out flattening of the bag, and prevents migration of the packaging goods-ed within a bag.

[0005]

[Embodiment of the Invention] If the example of a packed packaging machine supplies one sheet of the bag 12 which carries out the laminating of the two pieces installed in the periphery in Rota 10 like drawing 4 to the clamper 11 made into 1 set like an arrow head 13, said clamper 11 will receive injection restoration of rod-like packaging goods-ed by intermittence rotation to the clockwise rotation of Rota 10 in the bag which hung the bag 12 and carried out intermittence migration at a time one pitch and which carried out opening with the one halt section 14. And the halt section 15 like next is equipped with the following plastic surgery means.

[0006] That is, the migration orbit of the bag 12 supported to said clamper 11 with the halt section shown in <u>drawing 1</u> and <u>drawing 2</u> is separated, and the backing plate 21 fixed to the machine stool 20, and the movable clip 23 of the pair supported in the fluid cylinder 22 and the press object 24 of a pair counter. Said both movable clip 23 is supported by the sleeve 27 of substrate 26 both sides fixed to its ****** piston rod 25, and it energizes the tension of a spring 28 so that both the movable clip 23 may be extruded ahead. For this reason, if a piston rod 25 extrudes a substrate 26, the movable clip 23 forces the side edge of a bag 12 on a backing plate 21, and the reaction force of a spring 28 fixes bag 12 edges on both sides (refer to <u>drawing 3</u>). On the other hand, the press object 24 of a both-sides pair is formed with the roller supported free [rotation] through an axis of ordinate to a substrate 26, and these rollers 24 carry out the constriction of the bag 12 on packaging-goods-ed [cylindrical] 16 both sides. For a roller 24, as a result of rotating in order to avoid friction with a bag, the packaging goods 16-ed are main fake **** rare ** of a bag.

[0007] The **** rod 50 with which a substrate 26 is equipped in <u>drawing 1</u> is the rotation, and can adjust spacing of the both-sides roller 24 according to the size of the packaging goods 16-ed.

[0008] the electromagnetism installed in Rhine which connects a cylinder 25 and the fluid pump 30 in drawing 1 — vibration equipment is formed so that a change-over valve 31 may be gradually changed by the oscillating electric wave of the change power source 32. A roller 24 adds vibration to the packaging goods 16-ed by work of this equipment, and an assistant motion of **** packaging goods is assisted. In addition, the vibration equipment 35 which pushes up the packaging goods 16-ed from the bottom is more effective like drawing 3.

[0009] With the back section 15 in <u>drawing 4</u>, it puts on the center of a bag of packaging goods—ed, and both the clampers 11 are deserted like an arrow head after *****. It is in a condition as shown in <u>drawing 5</u>, and since the bag mouth neighborhood of a bag 12 becomes it tense by estrangement of both the clampers 11, the erection posture of the packaging goods 16—ed is held. In this case, by reducing the air content of the bag 12 interior by blasting of the pressurization air 36, posture maintenance of the packaging goods 16—ed becomes more effective. This is one mode of "degassing" indicated to a claim.

[0010] In drawing 4, a bag moves to the last section 37 further, and the heating seal of the bag mouth of a bag 12 is carried out at the same time it compresses by sponge rubber from both sides here and eliminates and deaerates internal air. In addition, when not performing degassing and a seal with the section 37 concerned, a bag 11 is moved to a vacuum chamber, had on both sides of a bag mouth from the section concerned, and degassing and the seal with which pascal values differ within this vacuum chamber are performed. In addition, these are also equivalent to "degassing" from which a mode differs.

[0011] <u>Drawing 6</u> is the example which uses the backing plate 21 with which the center became depressed, middle pinching of the bag 12 can be carried out with the movable clip 23 and a roller 24, and <u>drawing 7</u> is the example which made this structure a compression means to counter.

[Translation done.]

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DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] The partial top view of a packer

[Drawing 2] The partial sectional view of said packaging machine

[Drawing 3] The III-III **** Fig. in front drawing

[Drawing 4] The simple slant-face Fig. of a packer

[Drawing 5] The slant-face Fig. of the bag supported to the clamper

[Drawing 6] The flat-surface example of a compression means

[Drawing 7] The example from which a compression means differs

[Drawing 8] The explanatory view of the conventional example

[Description of Notations]

10 -- Rota

11 -- Clamper

12 -- Bag

14 -- Injection section

15 -- Back halt section

21 -- Backing plate

22 -- Fluid cylinder

23 -- Movable clamp

24 -- Press object-roller

25 -- Piston rod

26 -- Substrate

28 -- Spring

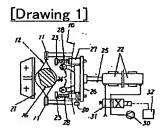
32 - Oscillating power-source-vibration equipment

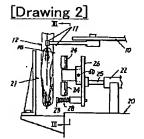
35 -- Vibration equipment

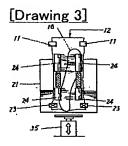
36 - Deatmospheric pressure

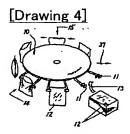
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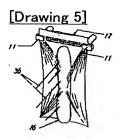
DRAWINGS

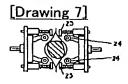




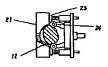


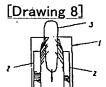






[Drawing 6]





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CORRECTION OR AMENDMENT

[Kind of official gazette] Printing of amendment by the convention of 2 of Article 17 of Patent

[Section partition] The 6th partition of the 2nd section [Publication date] July 3, Heisei 15 (2003. 7.3)

[Publication No.] JP,2002-68148,A (P2002-68148A) [Date of Publication] March 8, Heisei 14 (2002. 3.8) [Annual volume number] Open patent official report 14-682 [Application number] Application for patent 2000-264749 (P2000-264749) [The 7th edition of International Patent Classification]

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[FI]

B65B 61/24 7/02

[Procedure revision] [Filing Date] April 3, Heisei 15 (2003, 4.3) [Procedure amendment 1] [Document to be Amended] Specification [Item(s) to be Amended] Claim [Method of Amendment] Modification [Proposed Amendment]

[Claim(s)]

[Claim 1] In accordance with an endless orbit, intermittence migration of the one every pitch of the clampers of the a large number group which makes two pieces 1 set characterized by providing the following is carried out, and it is the halt section of said migration orbital halfway. The movable clip of the pair which is the packed packaging machine which throws in rod-like packaging goods-ed one by one, compresses the lower region edges on both sides of the bag pinched by said two clampers with spring pressure, respectively, and is fixed with the clamper halt section of said packaging-goods-ed injection section back in the bag which pinches edges on both sides by two clampers of said each class, and is supported in the shape of hanging The both-sides press object which turns **** packaging goods to the core of a bag, and corrects the deflection of packaging goods-ed [**** lump said cylindrical] from the both sides of the packaging goods-ed [cylindrical] inside said bag A means to deaerate the inside of the bag of the back

[Claim 2] Equipment according to claim 1 constituted with the roller which turns **** packaging goods to the core of a bag from the both sides of packaging goods-ed [cylindrical], and supports a ****** both-sides press object free [rotation] on an axis of ordinate,

respectively.

[Claim 3] Equipment according to claim 1 which turns **** packaging goods to the core of a bag from the both sides of packaging goods-ed [cylindrical], forms a ****** both-sides press object with the roller which supports 1 side free [rotation] on an axis of ordinate, and forms and constitutes a backing plate in the opposite section of each of this roller.

[Claim 4] Equipment [equipped with the vibrator which **** packaging goods are turned / vibrator / to the core of a bag from the both sides of packaging goods-ed / cylindrical /, and a ****** both-sides press object is installed / vibrator /, and makes vibration act on packaging goods-ed through this both-sides press object] according to claim 1.

[Claim 5] Claim 1 whose free adjustment of spacing of a both-sides press object was enabled thru/or equipment given [respectively] in 4.

[Procedure amendment 2]

[Document to be Amended] Specification

[Item(s) to be Amended] 0005

[Method of Amendment] Modification

[Proposed Amendment]

[0005]

[Embodiment of the Invention] If the example of a packed packaging machine supplies one sheet of the bag 12 which carries out a laminating to the clamper 11 which makes 1 set two pieces installed in the periphery in Rota 10 like drawing 4 like an arrow head 13, said clamper 11 will receive injection restoration of rod-like packaging goods-ed by intermittence rotation to the clockwise rotation of Rota 10 in the bag which hung the bag 12 and carried out intermittence migration at a time one pitch and which carried out opening with the one halt section 14. And the halt section 15 like next is equipped with the following plastic surgery means.

[Procedure amendment 3]

[Document to be Amended] Specification

[Item(s) to be Amended] 0006

[Method of Amendment] Modification

[Proposed Amendment]

[0006] That is, with the halt section shown in drawing 1 and drawing 2, the migration orbit of the bag 12 supported to said clamper 11 is separated, and the backing plate 21 fixed to the machine stool 20, and the movable clip 23 of the pair supported in the fluid cylinder 22 and the press object 24 of a pair counter. Said both movable clip 23 is supported by the sleeve 27 of substrate 26 both sides fixed to its ****** piston rod 25, and it energizes the tension of a spring 28 so that both the movable clip 23 may be extruded ahead. For this reason, if a piston rod 25 extrudes a substrate 26, the movable clip 23 forces the side edge of a bag 12 on a backing plate 21, and the reaction force of a spring 28 fixes bag 12 edges on both sides (refer to drawing 3). On the other hand, the press object 24 of a both-sides pair is formed with the roller supported free [rotation] through an axis of ordinate to a substrate 26, and these rollers 24 carry out the constriction of the bag 12 on packaging-goods-ed [cylindrical] 16 both sides. For a roller 24, as a result of rotating freely in order to avoid friction with a bag, the packaging goods 16-ed are main fake **** rare ** of a bag.

[Procedure amendment 4]

[Document to be Amended] Specification

[Item(s) to be Amended] 0008

[Method of Amendment] Modification

[Proposed Amendment]

[0008] the electromagnetism installed in Rhine which connects a cylinder 25 and the fluid pump 30 in drawing 1 — vibration equipment is formed as a change-over valve 31 is gradually changed by the oscillating electric wave of the change power source 32. A roller 24 adds vibration to the packaging goods 16-ed by work of this equipment, and it assists so that assistant ** of **** packaging goods, i.e., a posture, may be corrected. In addition, the vibration equipment 35 which pushes up the packaging goods 16-ed from the bottom is more effective like drawing 3.

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